

WHAT IS CLAIMED IS:

1. A dendritic cell that can induce the activation and proliferation of natural killer cells.
2. The dendritic cell according to claim 1, wherein the dendritic cell is characterized by the expression of increased levels of CD80, and CD86 as compared to a mature dendritic cell cultured in the presence of granulocyte-macrophage colony stimulating factor (GM-CSF) and interleukin 4 (IL-4).
3. The dendritic cell according to claim 1, wherein the dendritic cell is characterized by the expression of an increased level of CD1a on the surface of the cell as compared to a dendritic cell cultured in the presence of GM-CSF and IL-4.
4. The dendritic cell according to claim 1, wherein the number of NK cells is increased by at least 10 fold from the initial NK cell numbers after at least seven days co-culture.
5. The dendritic cell according to claim 1, wherein the number of NK cell is increased by at least 30 fold.
6. The dendritic cell according to claim 1, wherein the dendritic cell is characterized by the expression of interleukin 12 (IL-12), tumor necrosis factor α (TNF α), and GM-CSF.
7. A method for the induction of the formation of a dendritic cell that can induce the activation and proliferation of natural killer cells, comprising:
 - providing a cell population comprising low-adherence monocytic dendritic precursor cells;
 - contacting the low-adherence monocytic dendritic precursor cells with an effective amount of granulocyte-monocyte colony stimulating factor (GM-CSF) and interleukin 15 (IL-15) to form low-adherence immature dendritic cells;
 - contacting the low-adherence immature dendritic cells with an effective amount of a dendritic cell maturation agent under culture conditions suitable for maturation

of the low-adherence immature dendritic cells to form a low-adherence mature dendritic cell population.

8. The method according to claim 7, wherein the dendritic cell maturation agent is Bacillus Calmette-Guerin (BCG), lipopolysaccharide (LPS), TNF α , Interferon gamma (IFN γ), or combinations thereof.

9. The method according to claim 8, wherein the maturation agent is a combination of BCG and IFN γ .

10. The method according to claim 7, wherein the dendritic cells have been substantially purified.

11. The method according to claim 7, wherein the dendritic cells are characterized by the expression of increased levels of CD80, and CD86 as compared to a mature dendritic cell cultured in the presence of granulocyte-macrophage colony stimulating factor (GM-CSF) and interleukin 4 (IL-4).

12. The method according to claim 7, wherein the dendritic cells are characterized by the expression of an increased level of CD1a on the surface of the cell as compared to a dendritic cell cultured in the presence of GM-CSF and IL-4.

13. The method according to claim 7, wherein the dendritic cells are characterized by the expression of interleukin 12 (IL-12), tumor necrosis factor α (TNF α), and GM-CSF.

14. The method according to claim 7, wherein the dendritic cells are subsequently cryopreserved.

15. A method for inducing the activation and proliferation of natural killer (NK) cells, comprising:

contacting the NK cells with a dendritic cell that can induce the activation and proliferation of NK cells.

16. The method according to claim 15, wherein the dendritic cell is characterized by the expression of increased levels of CD80, and CD86 as compared to a mature dendritic cell cultured in the presence of granulocyte-macrophage colony stimulating factor (GM-CSF) and interleukin 4 (IL-4).

17. The method according to claim 15, wherein the dendritic cell is characterized by the expression of an increased level of CD1a on the surface of the cell as compared to a dendritic cell cultured in the presence of GM-CSF and IL-4.

18. The method according to claim 15, wherein the dendritic cells are characterized by the expression of interleukin 12 (IL-12), tumor necrosis factor α (TNF α), and GM-CSF.

5 19. The method according to claim 15, wherein the NK cells and the dendritic cell are contacted *in vivo*, *ex vivo*, or *in vitro*.

20. The method according to claim 15, wherein the NK cells are substantially isolated.

21. The method according to claim 15, wherein the NK cells are provided as a population of leukocytes.

10 22. The method according to claim 21, wherein the population of leukocytes are further contacted with antigen presenting dendritic cells.